

CLAIMS

What is claimed is:

1. A cooling device for light valve, comprising:

a printed circuit board;

5 a light valve which is disposed in the front of a front surface of said printed circuit board; and
a thermal diffuser disposed behind a back surface of said printed circuit board opposite to said
light valve, which has a fan in the center, around said fan having a plurality of diffuser fins,
wherein one end of said diffuser fins forms streamline channels to guide airflows cooling said
printed circuit board.

10 2. The cooling device for light valve according to claim 1, wherein said printed circuit board has
a hole on the back surface center of said light valve, the back surface of said light valve having
a diffuser pad on said hole.

3. The cooling device for light valve according to claim 2, wherein said thermal diffuser has a
base plate, said diffuser fins and said fan disposed on the front surface of said base plate,
15 wherein the back surface of said thermal diffuser has a convex passing through said hole,
connecting, and supporting said diffuser pad.

4. The cooling device for light valve according to claim 1, wherein said channels are formed by a
casing which covers the upper end of said diffuser fins.

5. The cooling device for light valve according to claim 1, wherein the edge of said channel
20 adjacent to said fan is formed by bending said diffuser fins as streamline.

6. The cooling device for light valve according to claim 1, further comprising a partition wall
between said fan and said diffuser fins opposite to said channel.

7. The cooling device for light valve according to claim 1, wherein said fan is disposed close to
said diffuser fins which is relative to said channel.

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